

REMARKS

Initially, Applicant and Applicant's attorneys express appreciation to the Examiner for the courtesies extended in the recent in person interview held with the Examiner on August 23, 2006. The amendments and remarks presented herein are consistent with those presented during the interview and in a subsequent communication with the Examiner on August 28, 2006.

The most recent Office Action, mailed June 28, 2006, considered and rejected claims 1, 10, 12-15, 17 and 19-21. Each of the pending claims were rejected under 35 U.S.C. § 102(e) as being anticipated by Hicks III et al. (U.S. Publ. No. 2004/0261112).¹

By this paper, claims 1, 12, 14, 15, 19 and 20, and claims 10 and 13 cancelled, such that following this amendment, claims 1, 12, 14, 15, 17 and 19-21 remain pending, of which claims 1 and 17 are the only independent claims at issue.²

As discussed in the interview, and as reflected in the above claims, the present invention is generally directed to methods and apparatus for receiving and recording programming in the same format in which it is received so as not to degrade the recording quality of the recorded programming. As reflected in claim 1, for example, a method is provided for recording one or more selected channels without decoding programming content and in which display of the recorded channels is permitted at the same time another selected channel is being recorded. In the recited claim, a multiplexed signal having multiple channels of digital programming content is received at a set top box which includes a single tuner. In the set top box, a first channel of the multiple channels is isolated and selected. For example, the set top box can use the tuner and a demodulator to tune the multiplexed signal and produce a multiplexed transport stream that comprises audio, video and data packets associated with a first channel. In addition, a transport demultiplexer may be connected to the demodulator so as to receive the transport stream and isolate the selected first channel. The digital content of the first channel may then be sent to a storage medium in the set top box and stored using the same digital format in which it was received. Moreover, while the digital content of the first channel is being stored, previously stored digital content of a second channel may be retrieved from the storage medium and decoded into an analog format for display at a display device. Thereafter, the decoded analog format of the content of the second channel can be displayed on the display device.

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

² Support for the claim amendments can be found throughout Applicant's original application, including, but not limited to, the disclosure at: p. 5, ll. 2-15; p. 8, ll. 2-12; p. 13, ll. 20-22; p. 14, ln. 14 to p. 15, ln. 9; and p. 16, ll. 3-22.

Claim 17 is directed to an entertainment system apparatus which includes a display device and a set top box, and wherein the set top box has functionality which generally corresponds to that recited in claim 1.

As discussed with the Examiner, while Hicks is generally directed to systems and methods for receiving and storing received multimedia content, it fails to disclose or suggest the methods and apparatus of the present invention. For example, among other things, Hicks fails to disclose a set top box for tuning, demodulating, storing and demultiplexing a multiplexed signal of multiple channels of digital programming content, particularly when considering that the set top box comprises only a single tuner for the multiplexed content and is configured to decode content of a second channel at the same time that currently received content of a first channel is received, as recited in combination with the other claim elements. In fact, Applicant submits that Hicks discloses the opposite, in which a server/gateway, rather than a set top box, stores the content and uses a plurality of tuners and demodulators when a multiplexed signal is received, and thereafter provides the content to one or more set top boxes.

For example, Hicks teaches a broadband multimedia gateway ("BMG") that operates as both a multimedia gateway and a content server within a client/server architecture. (§ 19). In particular, Hicks describes, particularly with reference to Figures 1, 2 and 6, various embodiments of a central BMG which includes enhanced functionality such as recording, playback, video on demand, interactive TV, Web surfing, and other features. (§ 23). As illustrated and described with respect to Figure 1, for example, the BMG 100 can include a tuner/demodulator 102 which is coupled to a mass storage device 103. (§ 36).

The BMG also receives one or more transmission streams of multiple signals which are passed through tuner/demodulator 102. (§ 37). The tuner of tuner/demodulator 102 can select an information channel from the signals and pass a signal to the demodulator which extracts the signal. (§ 38). The signal sent through the tuner/demodulator can be a discrete information signal or, in the alternative, it can be a multiplexed signal. (§ 38). In the case of a multiplexed signal, however, tuner/demodulator 102 includes a plurality of tuners and demodulators. (§ 38). Thereafter, once the information passes through the demodulators, an information signal is sent to the mass storage device for subsequent playback. (§ 40).

As also described in Hicks, when information stored on the mass storage device is desired, it can then be provided from the mass storage device to a data switch which, in turn, sends the information signal to an information appliance such as a set top box, which can then decode the information signal between various digital formats. (§§ 42, 55). In this manner, the functionality of the Hicks system is partitioned such that some functionality "resides in the central BMG as opposed to peripheral" set top boxes (e.g., tuning, demodulating, and storing), while other functionality resides in the set top box (e.g.

decoding). (¶¶ 23, 24).³ Accordingly, Hicks fails to teach a single tuner set top box which tunes, demodulates, demultiplexes, stores, and decodes a multiplexed signal, as recited in the claims, and instead teaches that for a multiplexed system, *multiple tuners* and demodulators are used in a *central server*, which then tunes, demodulates and stores the signal, but which uses a decoder in a separate, thin-client set top box to prepare the programming content for display. Moreover, Hicks expressly teaches that the decoder in the set top box converts "a digital information signal from a first digital format...to a second digital format," and fails to teach wherein the decoder decodes previously stored digital content of a second channel into an *analog* format for display, as recited in combination with the other claim elements. (See ¶¶ 47, 55).

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

³ Notably, while Hicks does disclose a decoder in the central BMG, this decoder does not function as the decoder in the claimed embodiments of the present invention. In particular, with respect to Figure 2, Hicks discloses that the signal processing circuitry 120 housing multiple tuners and decoders can be coupled to a decoder 126 that can convert between digital formats. (¶ 47). Notably, however, while decoder 126 is coupled to the tuners and demodulators, Hicks fails to disclose that where the decoder is used, a demultiplexed signal is passed to the storage medium which bypasses the decoder, or wherein content stored on the storage medium is sent through the decoder after storage and prior to display on a display device, as recited in combination with the other claim elements.

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Respectfully submitted,



RICK D. NYDEGGER
Registration No. 28,651
JENS C. JENKINS
Registration No. 44,803
COLBY C. NUTTALL
Registration No. 58,146
Attorneys for Applicant
Customer No. 047973

JCJ:CCN:gcd:ahy
AHY0000001605V001